

REMARKS

This amendment is filed together with a Request for Continued Examination (RCE) of the pending application, in response to the Office Action dated January 15, 2004, which was designated as Final. A Request for an Extension of Time in which to file this response is filed concurrently herewith.

Claims 1-32 were pending at the time of the Office Action, with claims 20-32 having been withdrawn from consideration. In the Office Action, claims 1-19 were rejected. A Request for Reconsideration was filed and considered by the Examiner, but was not deemed by the Examiner to place the application in condition for allowance.

By way of this amendment, claim 12 has been cancelled, and claim 1 has been amended. Reconsideration and allowance of pending claims 1-11 and 13-19, which remain under consideration, are respectfully requested.

Claim 1 has been amended to recite a stock suspension pH associated with the stock, the pH being set in a range of approximately 10-13. It is respectfully submitted that none of the cited prior art teaches the pH range for treating the stock in a process as recited in the pending claims, and claims 1-11 and 13-19 should be allowed.

Further, it is respectfully submitted that the prior art cited in the Final Office Action, including U.S. Patent 4,510,020 (Green et al.); U.S. Patent 4,055,903 (Hanson et al.) and U.S. Patent 5,810,973 (Carlsmith et al.) fails to teach the invention of pending claim 1, even without the recitation of a pH range in claim 1.

In the Final Office Action, the Examiner argued that Green et al. teaches the use of a refiner or a disintegrator and that each would inherently fluff pulp as taught by Carlsmith et al. and Hanson et al. In the alternative, the Examiner suggests that if the teaching of Green et al.

does not inherently teach fluffing of pulp, such would be obvious from the teaching of Hanson et al. or the teaching of Carlsmith et al. In the Advisory Action that followed the aforementioned Request for Reconsideration, the Examiner stated that the application was not in condition for allowance “because: Column 6, lines 37-39 of GREEN teach that the extensive agitation should occur... during the impregnation stage.”

It is respectfully submitted that this analysis by the Examiner ignores the different functions performed by refiners, disintegrators and fluffers; and, more importantly, the effect that each has on fiber stock processed therein. In recognition of the different stock treatments performed by the different devices, Applicants have specifically recited treating the stock in a fluffer.

In contrast to the teachings of Green et al., Hanson et al. or Carlsmith et al., alone or in combination, claim 1 recites in part:

treating the fiber suspension and the at least one additive together in a fluffer; and
separating the fiber material within said fluffer so as to increase a specific surface thereof, thereby optimizing accessibility of educts to the fiber surfaces.

Applicants submit that these aspects of the invention recited in claim 1 are neither taught, disclosed or suggested by Green et al., Hanson et al. or Carlsmith et al. alone or in combination.

The Examiner’s arguments have focused on whether or not a refiner or disintegrator fluffs pulp. Claim 1 does not recite “fluffing” or that the pulp is “fluffed.” Instead, claim 1 recites “treating ...in a fluffer”. It is respectfully submitted that whether or not a degree of “fluffing” occurs in either device, the action performed in a refiner or in a disintegrator is different from that performed in a fluffer, and the Examiner’s suggestion that either a disintegrator or a refiner would

inherently fluff pulp is misplaced. Treatment in either a refiner or a disintegrator affects pulp differently than treatment in a fluffer. Energy is put into the pulp in a refiner and in a disintegrator, and processing the pulp in either device changes physical properties different from treatment in a fluffer. Properties such as freeness of the pulp, or breaking length and porosity of products formed from the pulp are changed by treatment in refiners and disintegrators. Either refining or disintegrating causes significant mechanical interaction between fibers in the stock suspension or between surfaces of the device and the fibers in the suspension. The purpose for treating in a refiner or a disintegrator is to change the physical properties of the fibers.

In contrast thereto, a fluffer is intended to disperse fiber bundles and separate fibers. A fluffer loosens the suspension, separating fibers from one another without significant change to the physical structure or properties of the fibers. This is clearly different from treatment in a refiner or in a disintegrator, which in addition to separating fibers, each also change physical properties of the pulp and of products made from the pulp.

Applicants have specifically recited that treating the suspension is performed in a fluffer. Treatment in a fluffer avoids the further effects on the suspension that would occur in a refiner or in a disintegrator. The prior art cited by the Examiner teaches the use of a refiner or a disintegrator, but does not teach the use of a fluffer. Applicants respectfully submit that claims 1-11 and 13-19 are allowable for this reason as well.

Thus, it is respectfully submitted that claim 1 differs from the prior art in at least two aspects. Claim 1 recites a pH range for the stock not taught by the prior art, and claim 1 specifically recites treating the suspension in a fluffer, which is different than treating the suspension in either a refiner or a disintegrator. To equate treatment in a refiner or a disintegrator with treatment in a fluffer ignores the significant physical differences of the stock interaction in

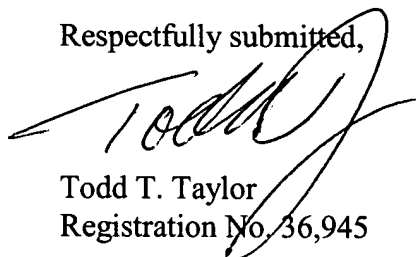
each, and ignores the change in stock characteristics that occurs in either a refiner or a disintegrator, apart from whether or not "fluffing" may also occur.

For the foregoing reasons, Applicants submit that no combination of the cited references teaches, discloses or suggests the subject matter of the amended claims. The pending claims are therefore in condition for allowance, and Applicants respectfully request withdrawal of all rejections and allowance of the claims.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorize that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (260) 897-3400.

Respectfully submitted,



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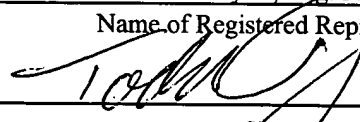
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: May 13, 2004.

Todd T. Taylor, Reg. No. 36,945

Name of Registered Representative



Signature

May 13, 2004

Date